

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A coolant for an air bag inflator, comprising: ~~which is~~

a cylindrical coolant body having a uniform thickness defined by an outer diameter and an inner diameter thereof and adapted to be cylindrical in shape, disposed in a housing of the said inflator for at least one of cooling and purifying in order to cool and/or purify a gas discharged from the said inflator, wherein said coolant being formed is obtained by compressing a first end of a molded product made of wire rods in an axial direction thereof, and compressing a second end, opposing the first end, of the molded product along the axial direction, such that an absolute value of a difference between a radial pressure loss of the axially upper half portion of said coolant closer to the first end and a radial pressure loss of the axially lower half portion of said coolant closer to the second end is adjusted to be 10 mmH₂O or less at a flow rate of 250 liters/minute under the atmosphere of 20°C on the axially opposite ends thereof.

2. CANCELLED.

3. (Currently Amended) A coolant for an air bag inflator according to ~~claim 2~~claim 1, wherein the ~~an~~ absolute value ~~of the~~

~~difference between the radial pressure losses of the axially upper half portion of said coolant and the radial pressure loss of the axially lower half portion of said coolant is 6 mmH₂O or less at a flow rate of 250 liters/minute under the atmosphere of 20°C.~~

4. CANCELLED.

5. (Currently Amended) A coolant for an air bag inflator according to claim 1, ~~which is cylindrical in shape, disposed in a housing of said inflator for the air bag in order to cool and/or purify a gas discharged from said inflator, wherein said coolant is obtained by compressing a molded product made of wire rods at least in the axial direction, and a difference in pressure losses between a vicinity of the first end and a vicinity of the second end axially opposite ends of said coolant is 10 mmH₂O or less, when it is measured in accordance with the following method:~~

1) covering an inner peripheral surface of a cylindrically formed coolant ~~is covered from one of its axial end to its one-half the height with an annular covering member;~~

2) closing one of the first end and the second end of said coolant, in which the covering member is fitted, ~~is closed with a first supporting member having a manometer, closing the other of the first end and the second end of said coolant is closed with a second another supporting member having a gas-inflow pipe and a~~

gas-flow meter, and fixing said coolant ~~is fixed axially to prevent air from leaking so that air will not leak between the ends of said coolant and the supporting members;~~

3) introducing the air at a flow rate of 250 liters/minute ~~is introduced from the gas-inflow pipe into an inner space of the covering member under the atmosphere of 20°C, and the pressure loss is measured;~~

4) turning next, said coolant ~~is turned the other way round with respect to upside down in the axial direction and covering the inner peripheral surface of a cylindrically formed coolant from the other one of its axial end to its one-half the height with the annular covering member;~~

5) closing the other of the first end and the second end of said coolant, in which the covering member is fitted, with the first supporting member, closing the one of the first end and the second end of said coolant with the second supporting member, and fixing said coolant axially to prevent air from leaking between ends of said coolant and the supporting members;

6) introducing the air at a flow rate of 250 liters/minute from the gas-inflow pipe into an inner space of the covering member under the atmosphere of 20°C, and measuring the pressure loss, ~~the opposite side of 1) (i.e., the side through which the air passed in 3)) is now covered with the covering member, and the pressure loss~~

~~of said coolant is measured under the same conditions as 2) and 3);~~
and

~~5)7) obtaining~~ a difference in the pressure loss values obtained in 3) and ~~6)4) is obtained~~, and determining its absolute value ~~is determined as~~ a difference in radial pressure losses in the axial ends of said coolant.

6. (Currently Amended) A coolant for an air bag inflator according to claim 1, wherein a bulk density of said coolant is 3.0 to 5.0 g/cm³~~5.0 g cm⁻³~~, and said coolant has a pressure loss of 10 mmH₂O to 2000 mmH₂O with respect to an amount of air of 1000 liters minute⁻¹ under the atmosphere of 20°C.

7. (Currently Amended) A coolant for an air bag inflator according to claim 1, wherein said coolant is an annular laminated body made of wire mesh formed by ~~plainly-knitting~~ stainless-steel wire rods,~~and said laminated body is compressed.~~

8. (Currently Amended) A method of producing a coolant for an air bag inflator, comprising:~~the steps of~~

compressing a first end of a cylindrical molded product having a uniform thickness defined by an outer diameter and an inner diameter thereof in an axial direction thereof; and

compressing a second end of the cylindrical molded product in the axial direction, such that an absolute value of a difference between a radial pressure loss of the axially upper half portion of the molded product closer to the first end and a radial pressure loss of the axially lower half portion of the molded product closer to the second end is adjusted to be 10 mmH₂O or less at a flow rate of 250 liters/minute under the atmosphere of 20°C at least axially,
~~wherein, in said compressing process, said molded product is compressed in the axial direction on the axially opposite ends thereof.~~

9. CANCELLED.

10. (Currently Amended) The A-method of producing a coolant according to claim 8, further comprising: ~~wherein said compressing process is carried out such that~~

adjusting a difference in pressure losses between axially opposite ends of the molded product ~~is adjusted to be 10 mmH₂O or less when it is measured in accordance with the following method:~~

1) covering an inner peripheral surface of a cylindrically formed coolant ~~is covered from one of its axial end to its one-half the height with an annular covering a covering member;~~

2) closing one of the first end and the second end of said coolant, in which the covering member is fitted, ~~is closed with a~~

first supporting member having a manometer, closing the other of the first end and the second end of said coolant is closed with a second another supporting member having a gas-inflow pipe and a gas-flow meter, and axially fixing said coolant to prevent air from leaking is fixed axially so that air will not leak between the ends of said coolant and the supporting members;

3) introducing the air at a flow rate of 250 liters/minute is introduced from the gas-inflow pipe into an inner space of the covering member under the atmosphere of 20°C, and the pressure loss is measured;

4) next, turning said coolant is turned the other way round with respect to upside down in the axial direction and covering the inner peripheral surface of a cylindrically formed coolant from the other one of its axial end to its one-half the height with the annular covering member;

5) closing the other of the first end and the second end of said coolant, in which the covering member is fitted, with the first supporting member, closing the one of the first end and the second end of said coolant with the second supporting member, and fixing said coolant axially to prevent air from leaking between ends of said coolant and the supporting members;

6) introducing the air at a flow rate of 250 liters/minute from the gas-inflow pipe into an inner space of the covering member

under the atmosphere of 20°C, and measuring the pressure loss, ~~the opposite side of 1) (i.e., the side through which the air passed in 3)) is now covered with the covering member, and the pressure loss of said coolant is measured under the same conditions as 2) and 3);~~ and

7)5) obtaining a difference in the pressure-loss values obtained in 3) and 6)4) ~~is obtained,~~ and determining its absolute value ~~is determined as a difference in radial pressure losses in the axial ends of said coolant.~~

11. (Currently Amended) The A-method of producing a coolant according to ~~any one of claims 8 to 10~~claims 8 or 10, wherein said compressing steps include, ~~process includes~~

the first compression step of compressing a first end of the molded product in its axial direction, and ~~the first process is followed by~~

the second compression step of turning the molded product axially upside down and further compressing a second end of the molded product in the axial direction.

12. (Currently Amended) The A-method of producing a coolant according to ~~claim 11,~~claim 11, wherein compressing distances in the first and second compression steps ~~steps~~ are substantially equal.

13. (Currently Amended) The A-method of producing a coolant according to claim 8, further comprising: wherein said molded product is compressed also
compressing the molded product in a the radial direction thereof in the compressing process.

14. CANCELED.

15. (Currently Amended) A method of producing a coolant according to claim 8, wherein said molded product is an annular laminated body obtained by forming a ~~plain~~-knitted wire mesh made of stainless-steel wire rods into a cylindrical body, pressing the cylindrical body in the radial direction to form into a plate body, and then rolling said plate body many times cylindrically.

16. (Currently Amended) An A-air bag inflator, comprising: 7
in
a housing having thereof with a gas discharge port, port;
an-ignition means adapted to be activated upon an impact, impact;
gas generating means adapted which is to be ignited and burnt
due to activation of the ignition means for generating a combustion gas, and gas; and

_____coolant means for one of purifying and ~~and/or~~cooling said combustion gas, ~~wherein~~said coolant means being ~~is~~the coolant means according to claim 1.

17. (Currently Amended) An air bag apparatus, comprising:

an air bag inflator;

an impact sensor for detecting an impact to activate said inflator;

an air bag introducing therein a gas generated by said inflator to inflate; and

a module case for accommodating said air bag, wherein

said air bag inflator is the inflator according to claim 16.

AMENDMENTS TO THE DRAWINGS

Attached hereto are seven (7) sheets of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected formal drawings incorporate the following drawing changes:

The view numbers in each drawing have been amended such that they are larger than the numbers used for reference characters to overcome the drawing objection;

In Fig. 1, the word "DRAWINGS" has been deleted;

In Fig. 3, each drawing has been labeled --Fig. 3(a)--, --Fig. 3(b)--, and --Fig. 3(c)--; and

In Figs. 7 and 8, the view numbers have been oriented to the drawings.

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.